

Abstract

A pupilometer having a pupil irregularity or non-uniformity detection capability. The pupilometer may comprise an imaging sensor for generating signals representative of a pupil of an eye, a data processor; and a program executable by the data processor for

5 enabling the data processor to process signals received from the imaging sensor and to thereby identify one or more regions of non-uniformity within an image of a perimeter of the pupil. The pupilometer may incorporate several innovative calibration and thresholding routines and may provide the basis for an innovative medical diagnostics system, when coupled to a network containing a suitable medical database and data

10 processing hardware.